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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/670,550	Applicant(s) SHAH, RAHUL L.	
	Examiner Joan B. Naurot Ton	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

This second action nonfinal is in response to applicant's arguments filed on May 7, 2007 and October 15, 2007, regarding Application number 10/670550.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA, 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 13, 14, 27, 28, 41, and 42 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 8, 17, 27, 36, 46, and 55 of U.S. Patent No. 10/670849. Although the conflicting claims are not identical, they are not patentably distinct from each other because it is obvious to remove parts from a method or system in order to meet the limitations of the conflicting claims.

Regarding claim 13 of 10/670550 vs. claim 8 of 10/670849, claim 14 of 10/670550 vs. claim 17 of 10/670849, claim 27 of 10/670550 vs. claim 27 of 10/670849, claim 28 of 10/670550 vs. claim 36 of 10/670849, claim 41 of 10/670550 vs. claim 46 of 10/670849, and claim 42 of 10/670550 vs. claim 55 of 10/670849, it is obvious to one of ordinary skill in the art at the time of the invention to remove parts from a method or system to meet the limitations of the conflicting claims.

3. Claims 12 and 26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 8 and 18 of U.S. Patent No. 10/670549. Although the conflicting claims are not identical, they are not patentably distinct from each other because it is obvious to remove parts from a method or system in order to meet the limitations of the conflicting claims.

Regarding claim 12 of 10/670550 vs. claim 8 of 10/670549 and claim 26 of 10/670550 vs. claim 18 of 10/670549, it is obvious to one of ordinary skill in the art at the time of the invention to remove parts from a method or system to meet the limitations of the conflicting claims.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15-26 are rejected under 35 U.S.C. 101 because the claimed subject matter is drawn towards non-statutory subject matter.

Claims 15-26 are still non-statutory as they could be directed towards a non-statutory category, in this case the computer readable medium being electromagnetic waves.

A computer readable medium must not be defined as a signal that passes through the air. It is suggested that the claims be amended from "computer accessible medium" to --computer readable storage medium comprising program instructions executed by a processor--.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 6, 7, 10, 15, 17, 20, 21, 24, 29, 31, 34, 35, and 38, are rejected under 35 U.S.C. 102(b) as being anticipated by Aravamudan et al (US Patent number 6301609, dated October 9, 2001), hereafter referred to as Aravamudan.

Regarding claim 1, Aravamudan discloses a method, comprising: detecting a computer system activity level indicative of computer system activity; determining whether said activity level exceeds an activity threshold in response to said detecting; and transitioning a presence state specific to an instant messenger client to a busy state

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in response to determining that said activity level exceeds said activity threshold, wherein said presence state corresponds to a given user. (Columns 7 and 8 of the specification, paragraph 3, entire paragraph, teaches activity detection in an instant messaging system with "active state" which means "busy" state, and activity thresholds. Aravamudan's activity threshold requires activity to occur in a certain amount of time in order to change to an active or busy state.)

Regarding claim 3, Aravamudan discloses the method as recited in claim 1, wherein said computer system activity comprises keyboard activity. (column 7 of the specification, line 14).

Regarding claim 6, Aravamudan discloses the method as recited in claim 1, wherein said computer system activity comprises processor utilization. (It is implied that various processor utilizations occur and is detected since keyboard activity is detected, which Aravamudan provides.)

Regarding claim 7, Aravamudan discloses the method as recited in claim 6, wherein said processor utilization further comprises a foreground processor utilization corresponding to activity of foreground computer system processes and a background processor utilization corresponding to activity of background computer system processes, and wherein said activity threshold further comprises a foreground process threshold corresponding to said foreground processor utilization. (It is implied that various processor utilizations occur and is detected since keyboard activity is detected in a computer activity detection method, which Aravamudan provides.)

Regarding claim 10, Aravamudan discloses the method as recited in claim 1, wherein said activity threshold further comprises a threshold time, and wherein determining whether said level of computer system activity exceeds an activity threshold further comprises determining whether the duration of said level of computer system activity exceeds said threshold time. (Column 7, paragraph 3, entire paragraph)

Regarding claim 15, Aravamudan discloses a computer-accessible medium comprising program instructions, wherein the program instructions are computer-executable to: detect a computer system activity level indicative of computer system activity; determine whether said activity level exceeds an activity threshold in response to said detection; and transition a presence state specific to an instant messenger client to a busy state in response to said determination that said activity level exceeds said activity threshold, wherein said presence state corresponds to a given user. (Column 7, paragraph 3, entire paragraph.)

Regarding claim 17, Aravamudan discloses the computer-accessible medium as recited in claim 15, wherein said computer system activity comprises keyboard activity. (column 7 of the specification, line 14 discusses keyboard activity; Column 12, paragraph 2, lines 12-16 discuss "digital signal processor (DSP) hardware, read-only memory (ROM) for storing software, random access memory (RAM), and non-volatile storage. Other hardware, conventional and/or custom, may also be included.")

Regarding claim 20, Aravamudan discloses the computer-accessible medium as recited in claim 15, wherein said computer system activity comprises processor utilization. (It is implied that various processor utilizations occur and is detected since

keyboard activity is detected in a computer activity detection method, which Aravamudan provides.)

Regarding claim 21, Aravamudan discloses the computer-accessible medium as recited in claim 20, wherein said processor utilization further comprises a foreground processor utilization corresponding to activity of foreground computer system processes and a background processor utilization corresponding to activity of background computer system processes, and wherein said activity threshold further comprises a foreground process threshold corresponding to said foreground processor utilization. (It is implied that various processor utilizations occur and is detected since keyboard activity is detected in a computer activity detection method, which Aravamudan provides.)

Regarding claim 24, Aravamudan discloses the computer-accessible medium as recited in claim 15, wherein said activity threshold further comprises a threshold time, and wherein determining whether said level of computer system activity exceeds an activity threshold further comprises determining whether the duration of said level of computer system activity exceeds said threshold time. (Column 7, paragraph 3, entire paragraph.)

Regarding claim 29, Aravamudan discloses a system, comprising: a computer system; and an instant messenger client software module configured to execute on said computer system; wherein said instant messenger software module is further configured to: detect a computer system activity level indicative of computer system activity; determine whether said activity level exceeds an activity threshold in response to said

detection; and transition a presence state specific to said instant messenger client software module to a busy state in response to said determination that said activity level exceeds said activity threshold, wherein said presence state corresponds to a given user. (Figure 1 of the drawings)

Regarding claim 31, Aravamudan discloses the system as recited in claim 29, wherein said computer system activity comprises keyboard activity. (Column 7 of the specification, line 14).

Regarding claim 34, Aravamudan discloses the system as recited in claim 29, wherein said computer system activity comprises processor utilization. (It is implied that various processor utilizations occur and is detected since keyboard activity is detected in a computer activity detection method, which Aravamudan provides.)

Regarding claim 35, Aravamudan discloses the system as recited in claim 34, wherein said processor utilization further comprises a foreground processor utilization corresponding to activity of foreground computer system processes and a background processor utilization corresponding to activity of background computer system processes, and wherein said activity threshold further comprises a foreground process threshold corresponding to said foreground processor utilization. (It is implied that various processor utilizations occur and is detected since keyboard activity is detected in a computer activity detection method, which Aravamudan provides.)

Regarding claim 38, Aravamudan discloses the system as recited in claim 29, wherein said activity threshold further comprises a threshold time, and wherein determining whether said level of computer system activity exceeds an activity threshold

further comprises determining whether the duration of said level of computer system activity exceeds said threshold time. (Column 7, paragraph 3, entire paragraph.)

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1, 2, 4, 6-8, 12-15, 18, 20-23, 27-29, 32, 34-36, and 37 are rejected under 35 U.S.C. 102(a) as being anticipated by Horvitz (PCT application WO 01/69387, dated September 20, 2001) in view of Horvitz (US patent 6622160)

Regarding claim 1:

Horvitz discloses A method, comprising: detecting a computer system activity level indicative of computer system activity; determining whether said activity level exceeds an activity threshold in response to said detecting; and transitioning a presence state of an instant messenger to a busy state in response to determining that said activity level exceeds said activity threshold, wherein said presence state corresponds to a given user. (P20, discusses "attentional focus", in order to decide "whether the user is currently amenable to receiving notification alerts." lines 15, and 1-2, respectively. P21, line 22-23 discusses that the "user should not presently be disturbed", implying a busy state, and that by "typing very quickly", that the "user is focused on a computer-related activity, and should not be unduly disturbed." P21, line 31, and P22, line 1, respectively.

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Horvitz discloses activity level and that the speed of typing very quickly can imply a computer system activity threshold since speed is a factor which indicates a busy state and the computer system implicitly must know what this threshold is in order to perceive a busy state. P21, bottom. Horvitz also discloses the "states can include the status of system components" as well as user activity on P14. Horvitz specifically mentions the use of instant messages on P16, line 8. Horvitz also states that the user activity can refer to the applications that the user is engaged in. P24, bottom paragraph states "Status and configuration of software applications and the ongoing stream of user activity generated by a user interacting with a computer also provide sources of evidence about a user's attention."

Regarding claim 2:

Horvitz discloses the method as recited in claim 1, further comprising: determining whether said activity level does not exceed said activity threshold subsequent to transitioning said presence state to said busy state; and transitioning said presence state of said instant messenger to an online state in response to determining that said level of computer system activity does not exceed said activity threshold. (P14, line 12 discusses user state, and paragraph 2, P14 discusses user activity; P20, discusses "predetermined thresholds")

Regarding claim 4:

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Horvitz discloses the method as recited in claim 1, wherein said computer system activity comprises mouse activity. (P14, line 23, discusses mouse activity)

Regarding claim 6:

Horvitz discloses the method as recited in claim 1, wherein said computer system activity comprises processor utilization. (line 3, P14 discusses "status of system components", in deciding the user's context or activity status.)

Regarding claim 7:

Horvitz discloses the method as recited in claim 6, wherein said processor utilization further comprises a foreground processor utilization corresponding to activity of foreground computer system processes and a background processor utilization corresponding to activity of background computer system processes, and wherein said activity threshold further comprises a foreground process threshold corresponding to said foreground processor utilization. (line 3, P14 discusses "status of system components", in deciding the user's context or activity status.)

Regarding claim 8:

Horvitz discloses the method as recited in claim 1, wherein said computer system activity is configurable by a user from a plurality of types of computer system activity. (P14, lines 23-26 discuss various types of computer system activity that can be configurable by the user, including applications that the user is working on, mouse information, and keyboard information)

Regarding claim 12:

Horvitz discloses the method as recited in claim 1, further comprising: storing schedule information corresponding to a given user, wherein said schedule information is indicative of an activity status of said given user at a given time; querying said schedule information; and if a current presence state of said instant messenger does not correspond to said activity status indicated by said schedule information, assigning a different presence state that corresponds to said activity status in response to said querying, wherein said current presence state and said different presence state each correspond to said given user. (Horvitz's analyzer uses "data in the user's calendar" and makes observations about the user's activity, to determine states such as "busy" or "open to receiving notification", P8, lines 16-21. Horvitz uses "active polling" or querying ... "by the receipt of information", implying that schedules are queried. lines 2-3, P15)

Regarding claim 13:

Horvitz discloses the method as recited in claim 1, further comprising: receiving an instant messaging operation directed to a given user, wherein said given user is not offline; determining said presence state of said instant messenger in response to receiving said instant messaging operation; and selectively processing said instant messaging operation dependent upon said presence state in response to said determining. (Horvitz's notification alerts can use an "instant message" line 7, P16, and selectively process it according to a user's state to determine states such as "busy" or "open to receiving notification", P8, lines 16-21.)

Regarding claim 14:

Horvitz discloses the method as recited in claim 1, further comprising: storing an instant messaging operation associated with a given presence state of said instant messenger, wherein said given presence state corresponds to a given user; detecting a transition to said given presence state subsequent to said storing; and performing said instant messaging operation in response to said detecting. (notifications can include an "instant message", line 7, P16, P20, lines 1-2 discuss whether the user is "currently amenable to receiving notification alerts." Since there are notifications which can be delayed based on presence detection, it is implied that the instant messaging or notification alerts are stored before sending immediately or later.)

Regarding claim 15:

Horvitz discloses a computer-accessible medium comprising program instructions, wherein the program instructions are computer-executable to: detect a computer system activity level indicative of computer system activity; determine whether said activity level exceeds an activity threshold in response to said detection; and transition a presence state of an instant messenger to a busy state in response to said determination that said activity level exceeds said activity threshold, wherein said presence state corresponds to a given user. (P13, line 22 discusses "machine-readable medium", and "attentional focus", in order to decide "whether the user is currently amenable to receiving notification alerts." lines 15, and 1-2, respectively, implying that the user is busy or not busy. P21, line 22-23 discusses that the "user should not presently be disturbed", implying a busy state, and that by "typing very quickly", that the "user is focused on a computer-related activity, and should not be unduly disturbed." P21, line 31, and P22,

line 1, respectively. Horvitz also discloses the “states can include the status of system components” as well as user activity on P14.

Regarding claim 18:

Horvitz discloses the computer-accessible medium as recited in claim 15, wherein said computer system activity comprises mouse activity. (P14, line 23, discusses mouse activity)

Regarding claim 20:

Horvitz discloses the computer-accessible medium as recited in claim 15, wherein said computer system activity comprises processor utilization. (line 3, P14 discusses “status of system components”, in deciding the user’s context or activity status.)

Regarding claim 21:

Horvitz discloses the computer-accessible medium as recited in claim 20, wherein said processor utilization further comprises a foreground processor utilization corresponding to activity of foreground computer system processes and a background processor utilization corresponding to activity of background computer system processes, and wherein said activity threshold further comprises a foreground process threshold corresponding to said foreground processor utilization. (line 3, P14 discusses “status of system components”, in deciding the user’s context or activity status.)

Regarding claim 22:

Horvitz discloses the computer-accessible medium as recited in claim 15, wherein said computer system activity is configurable by a user from a plurality of types of computer system activity. (P14, lines 23-26 discuss various types of computer system activity that can be configurable by the user, including applications that the user is working on, mouse information, and keyboard information, and that by "typing very quickly", that the "user is focused on a computer-related activity, and should not be unduly disturbed." P21, line 31, and P22, line 1, respectively)

Regarding claim 23:

Horvitz discloses the computer-accessible medium as recited in claim 15, wherein said activity threshold is configurable by a user. (P19, line 28, specifies that the context specifications are selectable by a user, in determining user's current context. P20, "The user can increase the threshold", line 18, and that by "typing very quickly", that the "user is focused on a computer-related activity, and should not be unduly disturbed." P21, line 31, and P22, line 1, respectively)

Regarding claim 26:

Horvitz discloses the computer-accessible medium as recited in claim 15, wherein said program instructions are further computer-executable to: store schedule information corresponding to a given user, wherein said schedule information is indicative of an activity status of said given user at a given time; query said schedule information; and if a current presence state of said instant messenger does not correspond to said activity status indicated by said schedule information, assign a different presence state that corresponds to said activity status in response to said

querying, wherein said current presence state and said different presence state each correspond to said given user. (Horvitz's analyzer uses "data in the user's calendar" and makes observations about the user's activity, to determine states such as "busy" or "open to receiving notification", P8, lines 16-21. Horvitz uses "active polling" or querying ... "by the receipt of information", implying that schedules are queried. lines 2-3, P15)

Regarding claim 27:

Horvitz discloses the computer-accessible medium as recited in claim 15, wherein said program instructions are further computer-executable to: receive an instant messaging operation directed to a given user, wherein said given user is not offline; determine said presence state of said instant messenger in response to receiving said instant messaging operation; and selectively process said instant messaging operation dependent upon said presence state in response to said determining. (Horvitz's notification alerts can use an "instant message" line 7, P16, and selectively process it according to a user's state to determine states such as "busy" or "open to receiving notification", P8, lines 16-21.)

Regarding claim 28:

Horvitz discloses The computer-accessible medium as recited in claim 15, wherein said program instructions are further computer-executable to: store an instant messaging operation associated with a given presence state of said instant messenger, wherein said given presence state corresponds to a given user; detect a transition to said given presence state subsequent to said storing; and perform said instant messaging operation in response to said detecting. (notifications can include an

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"instant message", line 7, P16 and P20, lines 1-2 discuss whether the user is "currently amenable to receiving notification alerts." Since there are notifications which can be delayed based on presence detection, it is implied that the instant messaging or notification alerts are stored before sending immediately or later.)

Regarding claim 29:

Horvitz discloses a system, comprising: a computer system; and an instant messenger software module configured to execute on said computer system; wherein said instant messenger software module is further configured to: detect a computer system activity level indicative of computer system activity; determine whether said activity level exceeds an activity threshold in response to said detection; and transition a presence state of said instant messenger software module to a busy state in response to said determination that said activity level exceeds said activity threshold, wherein said presence state corresponds to a given user. (The Abstract discloses a system, line 1, an instant messaging software module is implied since the system performs notifications through a notification manager, line 5, P12. Horvitz discloses "attentional focus", in order to decide "whether the user is currently amenable to receiving notification alerts." lines 15, and 1-2, respectively. P21, line 22-23 discusses that the "user should not presently be disturbed", implying a busy state, and that by "typing very quickly", implying an activity threshold, that the "user is focused on a computer-related activity, and should not be unduly disturbed." P21, line 31, and P22, line 1, respectively. Horvitz also discloses the "states can include the status of system components" as well as user activity on P14.)

Regarding claim 32:

Horvitz discloses the system as recited in claim 29, wherein said computer system activity comprises mouse activity. (P14, line 23, discusses mouse activity)

Regarding claim 34:

Horvitz discloses the system as recited in claim 29, wherein said computer system activity comprises processor utilization. (line 3, P14 discusses "status of system components", in deciding the user's context or activity status.)

Regarding claim 35:

Horvitz discloses the system as recited in claim 34, wherein said processor utilization further comprises a foreground processor utilization corresponding to activity of foreground computer system processes and a background processor utilization corresponding to activity of background computer system processes, and wherein said activity threshold further comprises a foreground process threshold corresponding to said foreground processor utilization. (line 3, P14 discusses "status of system components", in deciding the user's context or activity status.)

Regarding claim 36:

Horvitz discloses the system as recited in claim 29, wherein said computer system activity is configurable by a user from a plurality of types of computer system activity. (P14, lines 23-26 discuss various types of computer system activity that can be configurable by the user, including applications that the user is working on, mouse information, and keyboard information, and that by "typing very quickly", that the "user is

focused on a computer-related activity, and should not be unduly disturbed." P21, line 31, and P22, line 1, respectively)

Regarding claim 37:

Horvitz discloses the system as recited in claim 29, wherein said activity threshold is configurable by a user. (P19, line 28, specifies that the context specifications are selectable by a user, in determining user's current context. P20, "The user can increase the threshold", line 18, and that by "typing very quickly", that the "user is focused on a computer-related activity, and should not be unduly disturbed." P21, line 31, and P22, line 1, respectively)

Regarding claim 40:

Horvitz discloses the system as recited in claim 29, wherein said instant messenger software module is further configured to: I store schedule information corresponding to a given user, wherein said schedule information is indicative of an activity status of said given user at a given time; query said schedule information; and if a current presence state of said instant messenger software module does not correspond to said activity status indicated by said schedule information, assign a different presence state that corresponds to said activity status in response to said querying, wherein said current presence state and said different presence state each correspond to said given user. (Horvitz's analyzer uses "data in the user's calendar" and makes observations about the user's activity, to determine states such as "busy" or "open to receiving notification", P8, lines 16-21. Horvitz uses "active polling" or querying ... "by the receipt of information", implying that schedules are queried. lines 2-3, P15)

Regarding claim 41:

Horvitz discloses the system as recited in claim 29, wherein said instant messenger software module is further configured to: receive an instant messaging operation given user is not offline; directed to a given user; wherein said determine said presence state of said instant messenger software module in response to receiving said instant messaging operation; and selectively process said instant messaging operation dependent upon said presence state in response to said determining. (Horvitz's notification alerts system can use an "instant message" line 7, P16, and selectively process it according to a user's state to determine states such as "busy" or "open to receiving notification", P8, lines 16-21.)

Regarding claim 42:

Horvitz discloses the system as recited in claim 29, wherein said instant messenger software module is further configured to: store an instant messaging operation associated with a given presence state of said instant messenger software module, wherein said given presence state corresponds to a given user; detect a transition to said given presence state subsequent to said storing; and perform said instant messaging operation in response to said detecting. (Notifications can include an "instant message", line 7, P16, P20; lines 1-2 discuss whether the user is "currently amenable to receiving notification alerts." Since there are notifications which can be delayed based on presence detection, it is implied that the instant messaging or notification alerts are stored before sending immediately or later.)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4, 8, 9, 11, 18, 22, 23, 25, 32, 36, 37, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aravamudan in view of Horvitz (US Patent number 6622160, dated September 16, 2003).

Regarding claim 4:

Aravamudan discloses the method as recited in claim 1, wherein said computer system activity comprises mouse activity. Aravamudan discloses all the limitations as disclosed in claim 4 above except for mouse activity.

Horvitz teaches mouse activity detection. The general concept of providing for mouse activity detection is well known in the art as illustrated by Horvitz which discloses mouse activity detection in a messaging system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his instant messaging system in his advantageous method as taught by Horvitz in order to improve messaging communication as stated by Horvitz in Column 11, paragraphs 4, lines 60-63, and Column 12, lines 37-44 where

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he discusses whether or not to interrupt a user if the user is engaged in too much activity).

Regarding claim 8:

Aravamudan discloses the method as recited in claim 1, wherein said computer system activity is configurable by a user from a plurality of types of computer system activity. Aravamudan discloses all the limitations of claim 8 except for a user being able to configure their own computer system activity from a plurality of types of computer system activity.

Horvitz teaches that a user can configure his or her own computer system activity. The general concept of providing user configured computer system activity is well known in the art as illustrated by Horvitz, which discloses a user-configured computer system activity in an activity detection method.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his activity detection method in his advantageous method as taught by Horvitz in order to allow a user to "input distinct thresholds on alerting for inferred states of activity and nonactivity" as stated by Horvitz in Column 12, paragraph 4, line 41-43, and also lists mouse or keyboard activity as a plurality of computer system activity on line 41, column 12.

Regarding claim 9, Aravamudan discloses the method as recited in claim 1, wherein said activity threshold is configurable by a user. This is rejected the same way claim 8 is rejected.

Regarding claim 11, Aravamudan discloses the method as recited in claim 10, wherein said threshold time is configurable by a user. Aravamudan discloses all the limitations of claim 11 except for configuring the threshold time.

Horvitz discloses that users can specify thresholds for activity in his messaging system. The general concept of providing a user specified threshold time is well known in the art as illustrated by Horvitz which discloses user-specified thresholds which involve time in a messaging system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his activity detection method in his advantageous method as taught by Horvitz in order to provide user-specified thresholds "based on time" as stated by Horvitz in Column 12, line 46.

Regarding claim 18:

Aravamudan discloses the computer-accessible medium as recited in claim 15, wherein said computer system activity comprises mouse activity. Aravamudan discloses all the limitations of claim 18 as disclosed above except for mouse activity.

Horvitz teaches mouse activity detection. The general concept of providing for mouse activity detection is well known in the art as illustrated by Horvitz which discloses mouse activity detection in a messaging system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his instant messaging system in his advantageous computer-accessible medium as taught by Horvitz in order to improve messaging communication as stated by Horvitz in Column 11, lines 51-54 and lines 60-63, where

he discusses whether or not to interrupt a user if the user is engaged in too much activity).

Regarding claim 22:

Aravamudan discloses the computer-accessible medium as recited in claim 15, wherein said computer system activity is configurable by a user from a plurality of types of computer system activity. Aravamudan discloses all the limitations of claim 22 above except for a user being able to configure their own computer system activity from a plurality of types of computer system activity.

Horvitz teaches that a user can configure his or her own computer system activity.

The general concept of providing user configured computer system activity is well known in the art as illustrated by Horvitz which discloses a user-configured computer system activity in an activity detection method. It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his activity detection method in his advantageous method as taught by Horvitz in order to allow a user to "input distinct thresholds on alerting for inferred states of activity and nonactivity" as stated by Horvitz in Column 12, lines 40-43, and also lists mouse or keyboard activity as a plurality of computer system activity.

Regarding claim 23:

Aravamudan discloses the computer-accessible medium as recited in claim 15, wherein said activity threshold is configurable by a user. Aravamudan discloses all the limitations of claim 23 except for configuring activity thresholds by a user.

Horvitz teaches that a user can configure his or her own computer system activity thresholds. The general concept of providing user configured computer system activity is well known in the art as illustrated by Horvitz which discloses a user-configured computer system activity in an activity detection method.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his activity detection encoded method in his advantageous computer-accessible medium as taught by Horvitz in order to allow a user to "input distinct thresholds on alerting for inferred states of activity and nonactivity" as stated by Horvitz in Column 12, lines 40-43, and also lists mouse or keyboard activity as a plurality of computer system activity.

Regarding claim 25:

Aravamudan discloses the computer-accessible medium as recited in claim 24, wherein said threshold time is configurable by a user. Aravamudan discloses all the limitations of claim 25 above except for allowing a user to configure threshold time.

Horvitz teaches that a user can configure their own computer system activity thresholds and time is a part of the thresholds. The general concept of providing user configured computer system activity is well known in the art as illustrated by Horvitz which discloses a user-configured computer system activity in an activity detection method.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his activity detection method in his advantageous computer-accessible medium as taught by Horvitz in order to allow a user to "input

distinct thresholds on alerting for inferred states of activity and nonactivity" and "input an amount of idle activity following activity" which involves time thresholds as stated by Horvitz in Column 12, paragraph 4, lines 40-45 also lists mouse or keyboard activity as a plurality of computer system activity.

Regarding claim 32:

Aravamudan discloses the system as recited in claim 29, wherein said computer system activity comprises mouse activity. Aravamudan discloses all the limitations as disclosed in claim 32 above except for mouse activity.

Horvitz teaches mouse activity detection. The general concept of providing for mouse activity detection is well known in the art as illustrated by Horvitz which discloses mouse activity detection in a messaging system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his instant messaging system in his advantageous computer system as taught by Horvitz in order to improve messaging communication as stated by Horvitz in Column 11, line 54, and 5, lines 60-63, where he discusses whether or not to interrupt a user if the user is engaged in too much activity).

Regarding claim 36, Aravamudan discloses the system as recited in claim 29, wherein said computer system activity is configurable by a user from a plurality of types of computer system activity. Aravamudan discloses all the limitations of claim 36 except for a user being able to configure their own computer system activity from a plurality of types of computer system activity.

Horvitz teaches that a user can configure his or her own computer system activity.

The general concept of providing user configured computer system activity is well known in the art as illustrated by Horvitz which discloses a user-configured computer system activity in an activity detection method. It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his activity detection method in his advantageous method as taught by Horvitz in order to allow a user to "input distinct thresholds on alerting for inferred states of activity and nonactivity" as stated by Horvitz in Column 12, lines 40-43, also lists mouse or keyboard activity as a plurality of computer system activity.

Regarding claim 37:

Aravamudan discloses the system as recited in claim 29, wherein said activity threshold is configurable by a user. Aravamudan discloses all the limitations of claim 37 above except for configuring activity thresholds by a user.

Horvitz teaches that a user can configure his or her own computer system activity thresholds. The general concept of providing user configured computer system activity is well known in the art as illustrated by Horvitz which discloses a user-configured computer system activity in an activity detection method.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his activity detection method in his advantageous system as taught by Horvitz in order to allow a user to "input distinct thresholds on alerting for inferred states of activity and nonactivity" as stated by Horvitz in Column 12,

lines 40-43, and also lists mouse or keyboard activity as a plurality of computer system activity.

Regarding claim 39:

Aravamudan discloses the system as recited in claim 38, wherein said threshold time is configurable by a user. Aravamudan discloses all the limitations of claim 39 except for allowing a user to configure threshold time.

Horvitz teaches that a user can configure their own computer system activity thresholds and time is a part of the thresholds. The general concept of providing user configured computer system activity is well known in the art as illustrated by Horvitz which discloses a user-configured computer system activity in an activity detection method.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his activity detection method in his advantageous computer-accessible medium as taught by Horvitz in order to allow a user to "input distinct thresholds on alerting for inferred states of activity and nonactivity" and "input an amount of idle activity following activity" which involves time thresholds as stated by Horvitz in Column 12, lines 40-47 which also mentions "based on time" and also lists mouse or keyboard activity as a plurality of computer system.

8. Claims 5, 19 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aravamudan in view of Desimone et al, hereafter referred to as Desimone (US Patent number 6212548, dated April 3, 2001).

Regarding claim 5:

Aravamudan discloses the method as recited in claim 1, wherein said computer system activity comprises one or more simultaneous instant messenger sessions. Aravamudan discloses all the limitations of claim 5 above except for detecting the computer system activity comprising instant messaging sessions.

Desimone teaches multiple instant messaging sessions. The general concept of providing multiple instant messaging sessions is well known in the art as illustrated by Desimone which discloses multiple instant messaging sessions in an instant messaging system. It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his activity detection in his advantageous method as taught by Desimone in order to "reduce processing burden" as stated by Desimone in his abstract, line 9.

Regarding claim 19:

Aravamudan discloses the computer-accessible medium as recited in claim 15, wherein said computer system activity comprises one or more simultaneous instant messenger sessions. Aravamudan discloses all the limitations of claim 19 above except for detecting the computer system activity comprising instant messaging sessions.

Desimone teaches multiple instant messaging sessions. The general concept of providing multiple instant messaging sessions is well known in the art as illustrated by Desimone which discloses multiple instant messaging sessions in an instant messaging system. It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his activity detection in his advantageous

computer-accessible medium as taught by Desimone in order to "reduce processing burden" as stated by Desimone in his abstract, line 9.

Regarding claim 33:

Aravamudan discloses the system as recited in claim 29, wherein said computer system activity comprises one or more simultaneous instant messenger sessions. Aravamudan discloses all the limitations of claim 33 as above except for computer system activity comprising one or more simultaneous instant messenger sessions.

Desimone teaches multiple instant messaging sessions. The general concept of providing multiple instant messaging sessions is well known in the art as illustrated by Desimone, which discloses multiple instant messaging sessions in an instant messaging system. It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his activity detection in his advantageous computer-accessible medium as taught by Desimone in order to "reduce processing burden" as stated by Desimone in his abstract, line 9.

9. Claims 16, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aravamudan in view of McDowell et al, hereafter referred to as McDowell (US Publication number 2002/0035605, dated March 21, 2002) and Horvitz (US Patent 6622160, dated September 16, 2003).

Regarding claim 16, Aravamudan discloses the computer-accessible medium as recited in claim 15, wherein said program instructions are further computer-executable to: determine whether said activity level does not exceed said activity threshold subsequent to transitioning said presence state to said busy state; and transition said

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presence state of said instant messenger to an online state in response to determining that said level of computer system activity does not exceed said activity threshold.

Aravamudan discloses all the limitations of claim 2 above except for transitioning said presence state of said instant messenger to an online state in response to determining that said level of computer system activity does not exceed said activity threshold.

McDowell teaches the transitioning of states from busy states to online states. (P5, Tables 1 and 2 of the specification). The general concept of providing the ability to transition from a busy state to an online state is well known in the art as illustrated by McDowell which discloses busy states and online states in an instant messaging system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his activity detection method in his advantageous method as taught by McDowell in order to limit the number of messages received per hour and day as stated by McDowell on P13 of the specification, line 13 and also to detect online presence.

Horvitz teaches the use of activity thresholds which determine how busy the user is. The general concept of using activity thresholds to determine how busy the user in order to contact the user, or implicitly contact the user online is well known in the art as illustrated by Horvitz which discloses the ability to make decisions about the activity level detection in order to get the user online.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his activity detection method in his advantageous

method as taught by Horvitz in order to determine when the user should implicitly transition from a busy mode to an online mode as stated in Horvitz in Column 11, lines 60-63. ("It is important to know how busy the user is in making decisions about interrupting the user with information...")

Regarding claim 30, Aravamudan discloses the system as recited in claim 29, wherein said instant messenger software module is further configured to: determine whether said activity level does not exceed said activity threshold subsequent to transitioning said presence state to said busy state; and transition said presence state of said instant messenger software module to an online state in response to determining that said level of computer system activity does not exceed said activity threshold. Aravamudan discloses all the limitations of claim 2 above except for transitioning said presence state of said instant messenger to an online state in response to determining that said level of computer system activity does not exceed said activity threshold.

McDowell teaches the transitioning of states from busy states to online states. (P5, Tables 1 and 2 of the specification). The general concept of providing the ability to transition from a busy state to an online state is well known in the art as illustrated by McDowell which discloses busy states and online states in an instant messaging system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his activity detection method in his advantageous method as taught by McDowell in order to limit the number of messages received per

hour and day as stated by McDowell on P13 of the specification, line 13 and also to detect online presence.

Horvitz teaches the use of activity thresholds which determine how busy the user is. The general concept of using activity thresholds to determine how busy the user in order to contact the user, or implicitly contact the user online is well known in the art as illustrated by Horvitz which discloses the ability to make decisions about the activity level detection in order to get the user online.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan of his activity detection method in his advantageous method as taught by Horvitz in order to determine when the user should transition from a busy mode to an online mode as stated in Horvitz in Column 11, lines 60-63. ("It is important to know how busy the user is in making decisions about interrupting the user with information...")

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aravamudan in view of McDowell.

Regarding claim 12:

Aravamudan discloses the method as recited in claim 1, further comprising: storing schedule information corresponding to a given user, wherein said schedule information is indicative of an activity status of said given user at a given time; querying said schedule information; and if a current presence state of said instant messenger does not correspond to said activity status indicated by said schedule information, assigning a different presence state that corresponds to said activity status in response

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to said querying, wherein said current presence state and said different presence state each correspond to said given user. Aravamudan discloses all of the above limitations of claim 12 ("predefined schedule hierarchy" on Column 8, line 7) except that it does not explicitly state that each schedule corresponds to a given user.

McDowell explicitly teaches the use of each user storing schedule information and presence change detection in his instant messaging system. ("Presence determination", Abstract, and P 12 of the specification, Table 5 discusses each user inputting schedule information.) The general concept of providing the ability for storing schedule information, querying it, and making presence determination is well known in the art as illustrated by McDowell which discloses schedules and presence determination in an instant messaging system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify McDowell of his instant messaging method in his advantageous method as taught by McDowell in order to integrate the features into a "functionally seamless system" as stated by McDowell on P2 of the specification, paragraph 0014, lines 2-4.

Response to Arguments And Summary

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A. Applicant argues that adding the words "specific" and "client" to instant messenger overcomes the rejection, and that Aravaudan does not have an activity threshold but only a time threshold.

As to point A, both Aravamudan and both Horvitz references have an instant messenger client. The amended claim language is not patentable over the prior art since the references have instant messaging. The words specific and instant messaging client do not define over the prior art because both references have a specific instant messaging client.

B. Applicant argues that Aravadudan teaches detecting inactivity and not activity.

As to point B, Aravadmudan teaches both active states and inactive states and conveys messages regarding both. Col 7, lines 49-59 for active state. Figure 6 also discloses both sensing active status and inactive status.

Aravamudan also states that when a user becomes active after being inactive the instant messaging server is updated. This implies an activity threshold since the user's activity has changed the state and caused a transition from inactive to active because the threshold was reached. Aravamudan also states that activity such as actively typing on a keyboard is also conveyed to the IM server. Col 7, line 53.

Col 7, lines 49-59

C. Applicant argues that the prior art refers to a different predetermined threshold.

As to point C, the quotations used for predetermined threshold have been removed. However, Horvitz discloses activity level and that the speed of typing can imply a computer system activity threshold since speed is a factor which indicates a state such as do not disturb P21, bottom paragraph. The computer system must implicitly have a predetermined threshold for activity level in order to perceive a busy state since typing very quickly triggers the busy state. Horvitz also discloses the "states can include the status of system components" as well as user activity on P14. Horvitz specifically mentions the use of instant messages on P16, line 8. Horvitz also states that the user activity can refer to the applications that the user is engaged in. P24, bottom paragraph states "Status and configuration of software applications and the ongoing stream of user activity generated by a user interacting with a computer also provide sources of evidence about a user's attention."

D. Applicant argues that Horvitz (WO/0169387) does not meet the limitations of claim 9.

As to point D, the rejection of claim 9 under WO/0169387 is removed but the obviousness rejection still applies under Aravamudan, McDowell, and Horvitz (6622160).

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E. Applicant states that Horvitz does not have a presence state specific to an instant messenger client.

The words specific and instant messaging client do not define over the prior art because both references have a specific instant messaging client. Horvitz has a user receiving instant messages over a computer. P1, 2nd paragraph, which must implicitly have an instant messaging client. Horvitz also teaches "activity in which the user is currently engaged" for his context or presence information regarding delivery of messages. P1, last two lines, and P2, lines 4-6.

F. Applicant argues that Horvitz does not have a computer system activity that exceeds an activity threshold.

G. Applicant argues that Horvitz (WO/0169387) does not meet the limitations of claim 9.

As to point G, the rejection of claim 9 under WO/0169387 is removed but the obviousness rejection still applies under Aravamudan, McDowell, and Horvitz (6622160).

H. Applicant argues that the final rejection sent on 8/29/2007 should be withdrawn.

As to point H, the final rejection has been withdrawn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joan B. Naurot Ton whose telephone number is 571-270-1595. The examiner can normally be reached on M-Th 9 to 6:30 (flex sched) and alt Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



NATHANIEL FLYNN
SUPERVISORY PATENT EXAMINER